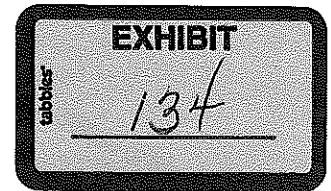




Loureiro Engineering Associates, Inc.



February 2, 2010

Bureau of Water Protection and Land Reuse
Planning and Standards Division
Department of Environmental Protection
79 Elm Street
Hartford, Ct 06106-5127

Attn: Paul E. Stacey, Director

RE: Proposed Stream Flow Standards and Regulations

Dear Mr. Stacey:

The department proposes to adopt, as the definition of "run-of-river", language that appears to have been paraphrased from language the State of Connecticut Department of Utility Control (CDUC) quoted as language used by the Federal Energy Regulatory Commission (FERC) to define "run-of-river" hydroelectric projects in a declaratory ruling concerning "run-of-the-river hydropower" as that term is used in subsections 26 and 27 of section 16-1(A) of the Connecticut General Statutes (Docket No. 04-02-07). The language quoted by the CDUC reads "run-of-river" operation means "no utilization of headpond storage and that outflow from the facility is equal to inflow from the pond on an instantaneous basis." The definition proposed by the department is *"Run-of-river" means a method of operating a dam on a continuous basis where no headpond storage is used and which results in a condition where outflow from the reservoir is equal to inflow on an instantaneous basis.*

The department also proposes to require that all dams on Class 1 river or stream segments "shall be operated in run-of-river operation". Virtually all dams that impound an upstream reservoir or pond attenuates inflow to the impoundment so that outflow does not, on an instantaneous basis, equal inflow. Therefore, a literal reading of the proposed definition of "run-of-river" would appear to require that all dams on Class 1 river or stream segments be fitted with gates that would have to be operated to increase the rate of outflow to the inflow rate. This effect could probably be approximated by opening the gates so that the head on the upstream side of the dam does not increase or decrease. It is suggested that this is not, or should not be, the intention of the department staff and that the definition should be modified so that the inflow being referenced in the definition is the flow from the reservoir or pond that must be discharged through or across the dam without causing an increase in head above the dam generating "headpond storage" or a decrease in head utilizing "headpond storage" to generate flow.

I tend to sympathize with the individuals who testified verbally at the hearing in favor of classifying the river and stream segments first so that they could better estimate how the



proposed regulations would affect their holdings or operations, however, I feel that they will be better served if they are able to testify concerning the impact of classifying specific river and stream segments where they have historically acquired rights to the waters which had flowed in such segments. In keeping with that attitude I strongly endorse the inclusion of the Class 4 designation as part of the regulations and I suggest that where water has been permanently diverted by withdrawal for public health and safety, flood control, industry, public utilities, water supply, agriculture, and other lawful purposes or altered due to construction or mining, Class 4 designation should be considered appropriate. In such situations, the down gradient watercourse in which the flow is diminished is often functionally equivalent to a headwater stream that is different rather than degraded.

Finally I would like to express concern that if public water supply safe yields are seriously reduced as a result of the proposed regulations it may tend to cause water companies to find cause to consider sources of supply that are not as protected as the clean water sources that are presently in use in Connecticut.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Robert B. Taylor

Robert B. Taylor
Senior Project Manager



Loureiro Engineering Associates, Inc.
An Employee Owned Company
100 Northwest Drive
Plainville, CT 06062

*Kristine
Stearns comments*

*Thanks,
Paul*

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